

Miller-Walker Basin Stormwater Retrofit Analysis

Public Comments and Responses – May 2014

Verbal Comments:

The following comments were captured from discussion at the Miller-Walker Basin meetings in Normandy Park on May 28, 2014 and Burien on May 29, 2014:

- Comment: 1st Avenue South detention pond in Burien does not allow passage to fish
 - Answer: There appears to be a misconception that Miller Creek flows through the Ambaum detention pond, which is south of 160th Street on 1st Avenue S. Miller creek actually flows around the pond. The pond has a catch basin and pipe that directs the outflow to the creek. To protect fish, they should be precluded from entering the pond, where they would be stuck with no way to get upstream.
- C: Are the two major re-developments in Burien (CVS at 1st Ave S & S 160th St, LA Fitness) improving stormwater retention?
 - A: Yes, at least one of these projects will improve stormwater retention. The CVS is putting in underground vaults as well as a bioswale to treat the water quality. The site will be retrofitted with hydrology restored to mimic the runoff from forested conditions. Projects already underway will be subject to current stormwater regulations. Also, this planning effort is specific to public property, not private.
 - Stormwater regulations are developed by City staff and approved by City Councils, and the minimum requirements are dictated by the Department of Ecology. Cities can approve more stringent requirements than the law requires, but cannot approve less stringent standards. The cities in the Miller-Walker basin are currently reviewing their standards to see how they can better implement low impact development (LID) practices, such as limiting impervious surfaces, dispersing runoff through native vegetation, amending soil with compost, keeping trees, planting trees, and using rain gardens, permeable pavement, vegetated roofs, and cisterns.
 - Here are some other ideas for cities to consider to encourage the use of green stormwater infrastructure:
 1. Develop incentives programs for implementing LID practices on private properties – a great example is Seattle and King County’s RainWise program: <https://rainwise.seattle.gov/city/seattle/overview>. Program participants in eligible basins can choose from a menu of best management practices (BMPs), select their own contractor, build projects, and receive a partial or complete rebate for approved facilities. Seattle and King County are both currently expanding this program to more neighborhoods.
 2. Develop a guidance document that provides a framework for incentivizing ‘green’ subdivisions that retain forestry, wildlife space, agriculture, fisheries, historical features and open space, among other resources. Incentives could include waiving requirements for a public hearing for properly designed green subdivisions that meet specified criteria, for example.
- C: The Sequoia Creek cul-de-sac in Normandy Park has several stormwater management opportunities

- A: This site was not selected because it is in a section of the Walker Creek basin that is near the mouth of the creek. This subbasin is not a high priority for stormwater retrofits because it does not contribute a large amount of stormwater into Walker Creek, and would have low overall effect on stream health.
- C: Area near 8th Ave SW and Sylvester Road SW has significant stormwater runoff.
 - A: Sylvester Road SW in this area is on the list of the top 30 stormwater retrofit project sites.
- C: Lake Burien must be protected from uncleaned stormwater runoff
 - A: Agreed – all the surface water in the basin runs into local waterways and Puget Sound untreated.
- C: Ongoing flooding issues in Burien on 152nd Street, between 14th and 18th avenues
 - A: This site is on the list of the top 30 stormwater retrofit projects. It may not end up making the final three to five projects because it already has sidewalks and is generally in better shape than many other sites – the pavement is being overlaid this summer.
- C: Detention pond near Miller Creek and Hwy 509 could be a good stormwater management opportunity
 - A: Runoff from Hwy 509 is a big priority, but is under the jurisdiction of the State Department of Transportation (WSDOT). At this time, WSDOT is not participating in efforts to improve runoff.
- C: Open ditches along SW Shorebrook Drive in Normandy Park have not been maintained and may be an opportunity for stormwater improvement
 - A: Much of SW Shorebrook Drive is within the floodplain and has a very high groundwater table, and due to that and the soil types, the area has very poor shallow and deep infiltration potential. Unfortunately, this makes the road a low priority for a stormwater retrofit project.

Written Comments

The following comments are transcribed from emails to Miller-Walker Basin staff and handwritten comment forms submitted at the Miller-Walker Basin meetings in Normandy Park May 28, 2014 and Burien on May 29, 2014:

- Comment: Since this project involves Burien, Normandy Park, and SeaTac, it would be nice if we can see some type of “before and after” drawings for these cities if possible. PS, if you need help, please count on me. I’m a mechanical engineer and CAD designer.
 - Answer: We will provide drawings at the design phase after we narrow down the list of sites to the top three to five projects. But we appreciate the offer to help!
- C: Infiltration, cleaning of the water, and slowing of flows interest me. Green stormwater infrastructure?? Find another word other than “green” which has actual meaning.
 - A: Green Stormwater Infrastructure has wide use in the region already (for example, see link below), as does the term “Low Impact Development.” The study uses these terms because they are recognized around the region.
 - <http://www.kingcounty.gov/environment/wastewater/CSO/Controlling/Reducing/GSI.aspx>

- C: There is not enough parking here [at Normandy Park City Hall Park]. I drove back home and walked up as there was no place to park. How about the Cove Building?
 - A: We apologize for the lack of parking during this meeting. We will try to avoid scheduling our meetings on busy nights in the future.
- C: Road runoff on 8th Ave SW down and across Sylvester Road interests me.
 - A: This was a project area suggested by City of Burien staff, and was ranked in the top 30 list of project sites. Sylvester Road is slated for sidewalk and other improvements, which could be a good opportunity for incorporating additional stormwater facilities.
- C: Although I live at the top of the hill, I have a sump pump and my neighbors do also. My address is [removed for commenter's privacy].
 - A: This is just north of a potential project area, B-18, where bicycle lanes will be built on SW 146th Street. However, it did not rank very high due to steep slopes and relatively low density of development compared to the rest of the basin.
- C: Instead of covering drainage ditches, turn them into rain gardens
 - A: This is an excellent idea where there are suitable soils, slopes, and groundwater conditions to allow the water to infiltrate into the ground. It becomes more expensive and difficult when it is steep, the soils are not porous, and the groundwater table is high. We have identified a few places in the basin where this would be a good opportunity.
- C: Inaccurate basin map reflects large impervious surfaces. Reality: 1) about 50% impervious 2) depressions without outlets 3) regional detention facilities/control structures are not shown 4) no sub-basin delineation or problem area delineation 5) some proposed systems don't work
 - A: We have updated the draft map titled "Existing Land Cover" based on your comment. The updated map re-labels "impervious" areas as "developed" areas to more accurately reflect developed commercial and residential conditions, which would include a mix of some pervious with impervious areas.
 - The depressional areas that do not drain directly to Miller Creek, except in the case of Hermes Depression via a pump, are included because they do not drain to Puget Sound directly. However, they do have local flooding and other issues that could benefit from stormwater retrofit projects.
 - Existing stormwater systems, including pipes, regional facilities, and control structures were displayed on separate map to make it easier to see. Several maps from the analysis, including this one and the sub-basins, were not included in the presentation, but are available for viewing on request and will be part of the final analysis report.
 - Problem area delineation was displayed at a later stage in the project, but problem area subcatchments will be determined only for the top few projects that are selected for pre-design.
- C: City of Burien may think about financially supporting residents who intend to install rain-wise gardens as districts in Seattle, e.g. Ballard, have done. Consideration: divide project into 1) City of Burien public roads/areas, 2) areas circumference of all large parking lots, e.g. at churches, steak houses, restaurants, 3) residential areas (the suggestion above would be for residential areas).

- The City of Burien's Neighborhood Matching Fund helps residents pay for projects that "foster self-help, neighborhood pride, and beautify Burien's neighborhoods." They will pay for half of a qualified project, up to \$5,000, for projects that are visible and accessed by public lands, and involve at least two neighbors. To learn more, go to Burien's Finance web page: <http://www.burienwa.gov/index.aspx?NID=195>.
 - A: If the City chooses to support an incentives program, a good example to review would be the Seattle and King County's Rainwise program - <https://rainwise.seattle.gov/city/seattle/overview>. Program participants in eligible basins can choose from a menu of BMPs, select their own contractor, build projects, and receive a partial or complete rebate for approved facilities.
- C: Please schedule meetings on Tuesday evenings, if possible. Please have the greeter say "hi" to everyone who enters. Now I'm wondering if he discriminates! Please do refrain from providing snacks that are sweet. Thanks for the refreshments.
 - A: We apologize if someone entering the room was not acknowledged. We have scheduled meetings to accommodate the schedules of the presenters as well as the venues holding the meetings, and to correspond with the project schedule.
- C: My neighbor & I both use sump pumps and would be interested in mitigating flooding in my area.
 - A: This location is adjacent to a tributary to Miller Creek, along Des Moines Memorial Drive in an area that was not selected for stormwater retrofit at this time. Depending on the direction your properties slope, and where the sump pumps are located, there may be opportunities for installing green stormwater infrastructure on your property to improve drainage.
- C: Be sure to meet with the planning department of the cities. What are your plans for use of trees to reduce runoff? We have ONE sump pump! Will there be any suggestions that individuals can do themselves/ How will you be working with the cities?
 - A: We are working closely with the basin partner cities (Burien, Normandy Park and SeaTac) to find opportunities to partner on upcoming projects already planned on public lands that might be compatible with stormwater retrofits. We intend to use trees where appropriate in our project designs because they are excellent at controlling stormwater runoff.
 - It is not part of the scope of this project to suggest things individuals can do themselves. However, see some ideas from the Seattle and King County RainWise program: https://rainwise.seattle.gov/city/seattle/rainwise_solutions.
- C: Runoff from streets must be cleaned before entering Lake Burien. A number of years ago I donated approximately 9 free trees & 5 free bushes towards Miller Creek to be planted. Do not add more blacktop over parking areas – especially along SW 152nd Street. I had difficulty with breaking down of bulkheads after Miller Creek was put in culverts.
 - A: Thank you for your comments. We agree that it is important to treat water before it enters the lake.
- C: I do not know if you are aware of mycoremediation processes that have been investigated in Washington State, especially those overseen by Paul Stamets. I believe such processes combined perhaps with HSD401 student involvement and using wood waste from city and county storm cleanup may have valuable, low cost approaches to helping reduce "non-point source" and storm water runoff facilitated pollution in the creek basins. If you are not familiar with mycoremediation, below are links to a Wikipedia entry and a Dungeness

watershed study. Mycoremediation has successfully helped increase water quality in Mason and Thurston counties as well as in Dungeness, so we have fairly local models to use as a baseline. <http://en.wikipedia.org/wiki/Mycoremediation>
http://dungenessrivercenter.org/documents/FinalMycoremediationReport_000.pdf

- A: Mycoremediation appears to have promise for breaking down some forms of pollution, including nutrients, fecal coliform bacteria, oils and pesticides. It requires someone knowledgeable about the types of mycelia needed for the pollution at a particular site, and is outside the scope of our study to incorporate.
- C: I just reviewed a draft of the next City of Burien newsletter and there is a notice that some time this summer or fall, the city will be replacing older storm water pipes in various locations along SW 152nd street between SW 10th and Maplewild Ave SW and installing one new storm water crossing at SW 14th Ave. Would be great if your storm water retro-fit program could be included.
 - A: According to Public Works staff at the City of Burien, the 152nd Street project is moving very quickly. Since our stormwater retrofit project pre-designs will not be completed until December, there won't be a chance to include these projects in the retrofit grant list. However, the project includes installing a facility to improve water quality at one of the outfalls to Lake Burien.